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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,973	02/27/2004	David Leslie Agnew	10543-076	9420

7590 04/04/2007  
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EXAMINER

JOHNSON, VICKY A

ART UNIT PAPER NUMBER

3682

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/789,973

**Applicant(s)**

AGNEW ET AL.

**Examiner**

Vicky A. Johnson

**Art Unit**

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                 | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Martindill (US 2,315,632).

Martindill discloses a brake mechanism for a braking system in a motor vehicle, the braking system including an input rod (43) for effecting actuation of vehicle brakes, the brake mechanism comprising: a pedal arm (48) pivotally connected to the vehicle (see Fig 7), a free end of the pedal arm having a brake pedal (see Fig 7) receiving an input force; a beam (49) interposed between the pedal arm and the input rod for transmitting an output force from the pedal arm to the input rod (col. 4 lines 63-68), the beam pivotally connected to the pedal arm and rotatable relative thereto (see Fig 7); a cam (16) defining a cam profile (see Fig 7), the beam contacting the cam and following the cam profile as the pedal arm swings relative to the vehicle (see Fig 7), the cam profile shaped to adjust the position of the beam to modify the ratio of the output force to the input force of the brake mechanism (col. 3 lines 5-35).

Re claim 2, the position of the beam relative to the pedal arm determines the force ratio of the brake mechanism (col. 3 lines 5-35).

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Re claim 3, the pedal arm travels between at least a neutral position and an extended position (col. 3 lines 5-35).

Re claim 4, the force ratio quickly increases as the pedal arm travels beyond a predetermined point past the neutral position to the extended position (col. 3 lines 5-35).

Re claim 5, the force ratio at the extended position is sufficient for vehicle braking (col. 3 lines 25-35) in a failed power situation (Inherent mechanical brakes).

Re claim 9, the cam profile includes a first portion generally perpendicular to the input rod and a second portion generally parallel to the input rod (see Fig 7).

Re claim 10, the cam profile includes a third portion connecting the first and second portions, the third portion being curved in shape (see Fig 7).

3. Claims 11-16 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (US 1,808,121).

Smith discloses a brake mechanism comprising: a pedal arm (12) pivotally connected (13) to the vehicle, the pedal arm receiving an input force from an operator of the vehicle; a beam (17) pivotally connected to the pedal arm at a first point (18) along the beam, the beam connected to the input rod (10) at a second point (14) along the beam, the beam transmitting an output force from the pedal arm to the input rod; a cam (15) having a surface defining a cam profile (see Fig 1); the beam contacting the cam at a third point (16) along the beam and following the cam profile, the beam pivoting relative to the pedal arm as the beam follows the cam profile to adjust the ratio of the output force to the input force of the brake mechanism (col. 1 lines 1-30).

Re claim 12, the position of the beam relative to the pedal arm is determined by the shape of the cam profile (see Fig 1).

Re claim 13, the position of the second point relative to the first point is determined by the shape of the cam profile (see Fig 1).

Re claim 14, the position of the second point relative to the first point determines the force ratio of the braking mechanism (see Fig 1).

Re claim 15, the second point moves from a position vertically below the first point to a position substantially horizontally aligned with the first point (see Figs 1 and 3).

Re claim 16, the pedal arm travels between a non-braked position and a braked position, and wherein the second point moves vertically upward as the pedal arm travels from the non-braked position to the braked position (see Figs 1 and 3).

Re claim 18, the beam includes a roller at the third point, the roller contacting the cam and following the cam profile (see Fig 1).

Re claim 19, the surface of the cam defines a track defining the cam profile, the beam engaging the track (see Fig 2).

Re claim 20, the cam profile includes a substantially vertical surface transitioning into a substantially horizontal surface (see Fig 1).

***Allowable Subject Matter***

4. Claims 6-8 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


1,754,354	Gans	(cam)
3,788,161	Krusemark	(cam)
3,810,400	Schroter	(cam)
4,386,537	Lewis	(cam)
4,615,235	Horvath	(cam)
4,624,152	Stotz et al	(cam)
6,446,526	Reimann et al	(cam)
7,082,853	Fujiwara	(cam)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6217. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Vicky A. Johnson  
Primary Examiner  
Art Unit 3682  
3/28/07